

Refer to: 19780304 - Will County - Lemont/Union Oil Company
ILD041550567 - Subpart F Inspection

November 4, 1983

Mr. L. A. Erchull
Union Oil Company of California
Chicago Refinery
Lemont, IL 60439



Dear Mr. Erchull:

An inspection of your facility located at 135th & New Avenue in Lemont, Illinois was conducted on September 23, 1983 by a representative of the Illinois Environmental Protection Agency (IEPA). The purpose of the inspection was to determine your facility's compliance with the 35 Illinois Administrative Code (35 IL. A.C.), Part 725 Regulations, Subpart F, Groundwater Monitoring Requirements. The following is a list of Subpart F deficiencies that were noted during the inspection.

Section 725.191 (a) (2).

An insufficient number of monitoring wells are installed hydraulically downgradient at the limit of the waste management area. Monitoring wells #3 and #6 are not properly located for the prompt detection of any statistically significant amounts of hazardous waste that migrate from the waste management area to the uppermost aquifer.

Section 725.193 (a).

The outline of the facility's groundwater quality assessment program is inadequate in that it does not describe a program capable of determining whether hazardous waste or hazardous waste constituents have entered the groundwater, the rate and extent of their migration and the concentrations. The actual groundwater quality assessment plan should at a minimum specify those items found under Section 725.193 (d) (3).

Section 725.190

Boring logs and cross sections found in the August, 1981 Hydrogeologic Investigation of the Land Application Site revealed the presence of a silty sand layer above the present zone of monitoring. The report does not indicate the lateral extent of this layer nor the possibility of perched groundwater conditions existing in this zone. A regional hydrogeologic map of the area should be submitted showing the extent of the silty sand layer,

Section 725.190 Continued

the hydraulic relation, if any, between this layer and the dolomite aquifer, and the regional groundwater flow directions. The Illinois State Geological Survey and the Illinois State Water Survey may be able to supply some of the information you will need.

One should remember that the primary goal for the groundwater monitoring system is the prompt detection of contaminants leaving the waste management area. Initial indications reveal the potential for contaminants to move laterally through the previously mentioned silty sand layer at elevation 660 M.S.L. prior to entering the zone of current monitoring. This possibility should be addressed and if warranted, additional monitoring wells installed.

Please confirm in a letter to us within fifteen (15) days after receipt of this letter, a description of the steps taken to correct the above deficiencies. Failure to correct the above deficiencies may result in enforcement actions initiated by the I.E.P.A. Please send your reply to the above address. Should you have any questions concerning this matter, please contact Craig J. Liska of my staff at the above number.

Sincerely,

Kenneth Bechely, Northern Region Manager
Field Operations Section
Division of Land Pollution Control

KPB:CJL:gkw

enclosures

CC - Division File
- Northern Region ✓
- Mark Haney, Compliance Monitoring Section
- CJL